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**Test Procedure for****BREAKING STRENGTH OF TRAFFIC BUTTONS****TxDOT Designation: Tex-434-A****Effective Date: August 1999**

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**1. SCOPE**

- 1.1 Use this method to determine the axial load required to break a traffic button when circumferentially supported.
  - 1.2 The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.
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**2. APPARATUS**

- 2.1 *Cylinder*, hollow metal, 25 mm (1 in.) high, with an internal diameter of 75 mm (3 in.) and a wall thickness of 6 mm (0.25 in.)
  - 2.2 *Cylinder*, solid metal, 25 mm (1 in.) diameter, through which the load is applied.
  - 2.3 *Neoprene pad*, 110 × 110 × 5 mm (4.25 × 4.25 × 3/16 in.), with a Shore A Hardness of 70 ± 5.
  - 2.4 *Testing machine*, meeting the requirements of ASTM E 4.
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**3. PROCEDURES**

- 3.1 *Traffic Buttons:*
    - 3.1.1 Center button base down on neoprene pad, over open end of metal cylinder on platen of machine.
    - 3.1.2 Place the unit under the machine so that the load will apply to the top of the center of the button through the solid cylinder.
    - 3.1.3 Adjust the testing machine to a free loading speed of 5 mm (0.2 in.) per min.
    - 3.1.4 Stress the button to failure and record the maximum load.
  - 3.2 *Pavement Markers:*
    - 3.2.1 Center pavement marker over open end of metal cylinder on platen of machine.
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- 3.2.2 Place unit under machine so that the load will apply to top of the marker through the solid cylinder.
- 3.2.3 Adjust testing machine to a free loading speed of 5 mm (0.2 in.) per min.
- 3.2.4 Stress pavement marker to failure and record maximum load and total deflection.